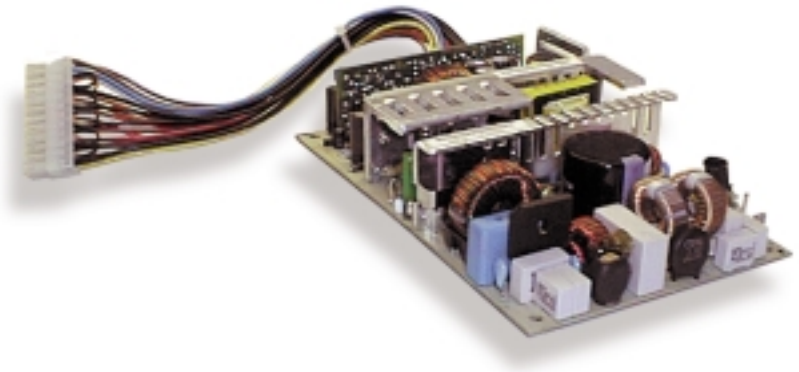
Distributed by:

JAMECO® ELECTRONICS

www.Jameco.com ✦ 1-800-831-4242

The content and copyrights of the attached material are the property of its owner.

AA20140



AA20140

Total Power	*70 - 120 Watts*
Input Voltages	*85 - 264VAC*
# of Outputs	*Quad*

SPECIAL FEATURES

- Active power factor correction
- EN61000-3-2 compliance
- Remote sense on outputs one and two
- Industry-standard 4.25” x 7” footprint
- Adjustable main outputs
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection

ENVIRONMENTAL

Operating temperature: 0° to 50°C ambient; derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: Designed to meet EN61000-4, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing 20% to 90%

Vibration: 5-32 Hz sinewave .02” double amplitude 32-2 kHz sinewave 1 G peak

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

MTBF per MIL STD 217E: >200,000 hours at full load and 30°C ambient conditions and full load

ELECTRICAL SPECIFICATIONS

Input

Input range ..... 90-264 VAC
Frequency ..... 47-63 Hz
Inrush current ..... 40 A max., cold start @ 25°C
Efficiency ..... 65% typical at full load
EMI filter ..... FCC Class B conducted and radiated, CISPR 22 Class B conducted and radiated, EN55022 Class B conducted and radiated, VDE 0878 PT3 Class B conducted and radiated.
Power factor ..... 0.99 typical
Safety ground
Leakage current ..... <2 mA @ 50/60 Hz, 254 VAC input

Output

Maximum power ..... 70 W convection; 120 W with 30 CFM forced air
Adjustment range ..... ±5% minimum on 3.3 V and 5 V outputs
Hold-up time ..... 15 ms @ 120 W load, 115 VAC input
Overload protection ..... Short circuit protection on all outputs. Case overload protected @ 110145% above peak rating
Overvoltage protection ..... 3.3 V output: 4.25 V ±.25 V
5 V output: 6.25 V ±.75 V, 20-35% above nominal output. Latching type recycle AC to reset.
Remote sense ..... Compensates for 0.5 V lead drop min. Will operate without remote sense connected.

SAFETY

TUV	EN60950	9837006
UL	UL1950	E186249
CUL	CSA 22.2-234 Level 3	E186249
CB	Certificate and report	DE2-002056
CE	Mark (LVD)	

6F., CDW Building
382-392 Castle Peak Road
Tsuen Wan, N.T., Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426

Astec House, Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX, UK
Telephone: +44(0)1384-842211
Facsimile: +44(0)1384-843355

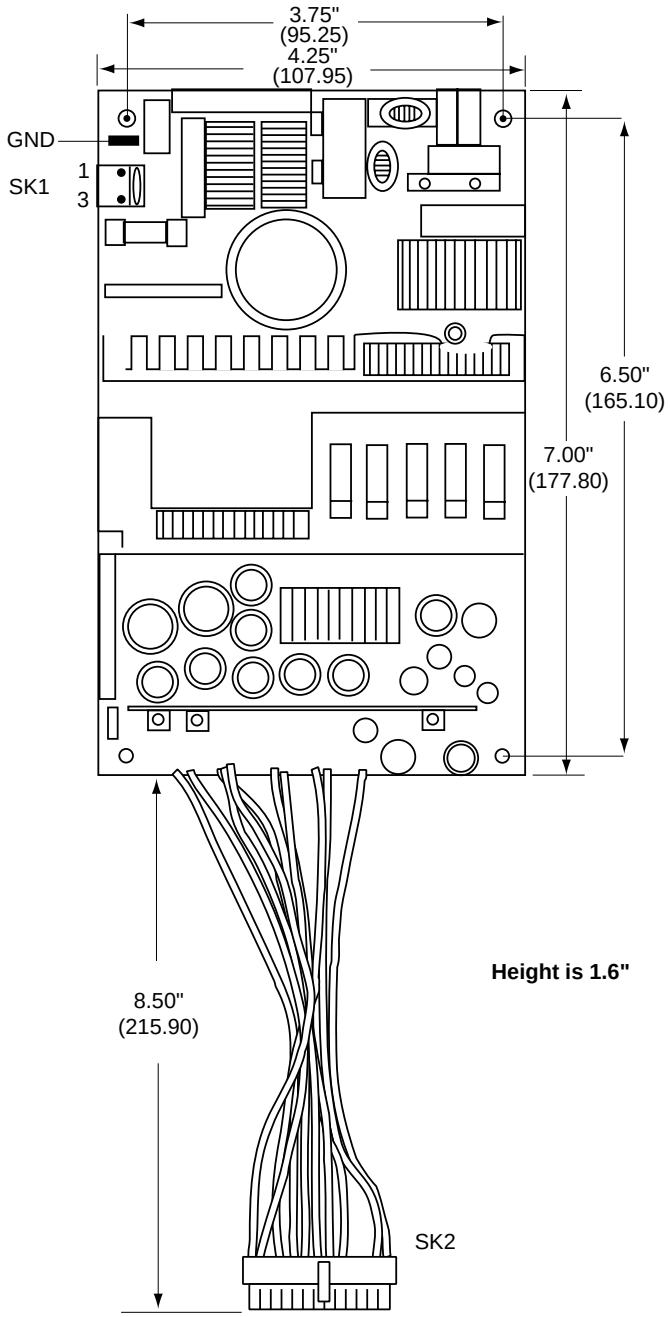
5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
AA20140	+3.3 V	0 A	8 A	16 A	18 A	±2%	50 mV
	+5 V	1 A	10 A	20 A	22 A	±3%	50 mV
	+12 V	0.2 A	1 A	2 A	3 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.5 A	1 A	±10%	120 mV

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
4. Minimum loads are required.

DRAWINGS



Height is 1.6"

PIN ASSIGNMENTS

Connector		
SK1	PIN 1	Neutral
	PIN 3	Live
SK2	PIN 1-10	Common
	PIN 11	+5 Sense
	PIN 12	+3.3 V Sense
	PIN 13	+12 V
	PIN 14-17	5 V
	PIN 18-22	3.3 V
	PIN 23	Return Sense
	PIN 24	-12 V

MATING CONNECTORS

(SK1) AC Input: Molex: 09-50-8031 (USA)
Molex: 09-91-03500 (UK)
PINS: 08-58-0111

(SK2) DC Output: Molex: Right angle
39-30-1240 or
39-29-1248
or
Vertical
39-28-1243

Astec Connector Kit #70-841-013

NOTES

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance ±.02".
3. Warranty: 1 year
4. Weight: 1.38 lb. / .63 kg

REV 10.5.99